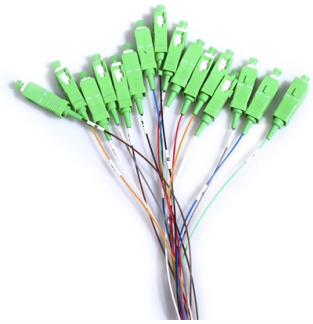
Huijue Optical Cable Flame Retardant Rating Standard



Overview

Armoured and Flame retardant optical fibre cable, AICI - code F104 NEK TS 606:2016 (available also in MUD protected version).

Key Takeaways

Huijue optical cables adhere to international flame retardant and fire-resistant standards, including IEC 60332, IEC 60331, BS 6387, and UL/NFPA codes, with LSZH or OFNR jacket materials depending on application. Key Flame Retardant StandardsIEC 60332: This standard specifies tests for single and multiple cable flame propagation. Huijue optical cables meet IEC 60332-1-2 for single-cable flammability and IEC 60332-3-24 for multiple-cable flammability, ensuring that the cables resist ignition and limit flame spread in installations.

IE

C 60331: Defines circuit integrity under fire conditions, testing cables for their ability to maintain signal transmission during high-temperature exposure. Huijue cables demonstrate minimal optical attenuation under fire, e.g., 0. 16 dB change after 90 minutes at 750°C, and comply with BS 6387 “CWZ” category for fire, water, and mechanical shock resistance.

B

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S 6387: Categorizes fire-resistant cables into CWZ, C, W, and Z tests. Huijue cables maintain optical performance under fire alone, fire with water, and fire with mechanical shock, making them suitable for tunnels, subways, and other critical infrastructure. UL/NFPA and NEC Compliance: For North American applications, flame retardant optical cables are tested according to UL-1666 (OFNR) and NFPA 70 (NEC) standards.

These ratings ensure cables prevent flame propagation in vertical riser shafts and indoor installations. Material ConsiderationsLSZH (Low Smoke Zero Halogen): Huijue cables often use LSZH jackets, which produce minimal smoke and no halogen gases during combustion, reducing toxicity and corrosion risks in confined spaces like tunnels or data centers.

OFN

R (Optical Fiber Non-Conductive Riser): For vertical installations, OFNR-rated cables prevent flame spread between floors and comply with UL-1666, making them suitable for riser shafts in multi-story buildings.

PVC and Other Flame-

Retardant Compounds: Some Huijue cables may use PVC with flame retardant additives to meet vertical-burn or riser ratings, though LSZH is preferred in public or poorly ventilated spaces due to lower smoke and toxicity.

Testing and Certification

Huijue optical cables are typically tested by Nationally Recognized Testing Laboratories (NRTL) or equivalent independent labs to verify compliance with IEC, BS, UL, and NFPA standards. Tests include: Flame propagation (single and multiple cables)Smoke density and toxicityCircuit integrity under fireMechanical and water resistance under fire conditions These certifications ensure that Huijue cables are safe for use in critical infrastructure, including subways, tunnels, and high-density indoor environments.

Summary

Huijue optical cables are designed to meet high flame retardant and fire-resistant standards, including IEC 60332, IEC 60331, BS 6387, and UL/NFPA codes. Depending on the installation environment, cables may feature LSZH or OFNR jackets to minimize flame spread, smoke, and toxic gas emissions. Independent testing ensures that these cables maintain optical performance under fire, water, and mechanical stress, making them suitable for subway stations, tunnels, riser shafts, and other critical applications.

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Article Content

IEC 60332 Flame Retardant Cable Best Standards

Learn about IEC 60332, the international standard for flame retardant cable testing. Understand its types, importance, and how it ensures fire safety in electrical

Fiber Optic Cables

Armoured and Flame retardant optical fibre cable, AICI - code F104 NEK TS 606:2016 (available also in MUD protected version).

AEN071 rev 4 9-28-23 PDF_

UL 1651 specifies the requirements for listing cable of these types and they include flame performance testing, marking durability, and other marking requirements. The two most common requirements in

Fiber Optic Cable Jackets and Fire Ratings Explained

In this article, we''ll explore what a fiber optic cable jacket is, the common optical fiber cable jacket materials, the classification of fiber optic cable fire ratings (such as OFNP vs OFNR),

Fiber Cable Fire Ratings: Lszh, Pvc And Flame-Retardant Options ...

This short guide explains the commonly used materials — LSZH and PVC — how industry fire-rating systems (plenum, riser, vertical flame tests) work, and practical tradeoffs so you can pick the right

Fire Resistant Cable Standards

Explore the essential Fire Resistant Cable Standards and grades from various countries to ensure safety and compliance in your projects.

Fiber Optic Cable: Jacket & Fire Rating

This article examines fiber optic cable jackets, materials like LSZH, and fire ratings such as plenum and riser. It defines what comprises a cable and

Flame Retardant and Fire-Resistant Cable Standards Explained: IEC

People often mix up these terms, but understanding this distinction literally saves lives: Flame Retardant Cables (Fire Limiting) Think of these as "self-extinguishing" cables. If fire touches

Fireproof cable flame retardant classification and related standards

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Flame retardant cable is characterized by delaying the spread of flame along the cable so that the fire does not expand. Because of its low cost, it is a large number of fire-resistant cable

Product Spec Sheet 008T81-31180-A1

With a flame-retardant outer jacket, this cable is particularly useful for heavy traffic or more challenging mechanical exposure conditions and applications requiring extra rugged cables. This

Lifeline QFCI Fire Resistant Fiber Optic Cable

Lifeline® QFCI Fire Resistant Fiber Optic Cable Survivability in a Fire for Vital Communication and Emergency Systems Regulators & Regulations National Fire Protection Agency (NFPA) The NFPA is

Indoor Fiber Optic Cables | Flame Retardant Indoor Cable Products

Corning indoor fiber optic cables are used in spaces that require a flame retardant jacket. These cables may be deployed in duct (conduit) or cable tray.

3 Fiber Optic Cable Fire Rating – OFNP, OFNR And OFN

The fire rating of fiber optic cable can be specificed into 3 types, which are OFNP, OFNR and OFN. Before we can talk about the flame retardant grade, we can first understand what is LSZH

Product Spec Sheet 012T8P-31191-A3

012T8P-31191-A3 Corning FREEDM® One interlocking armored cables are flame-retardant, indoor/outdoor cables designed for interbuilding and intrabuilding backbone installations

Fireproof cable flame retardant classification and related standards

Fire-rated cable has been a very popular product type in the cable industry, third-party testing of fire-rated cable performance verification has a crucial role, TSTCABLES share with you

Fiber Cable Fire Ratings: Lszh, Pvc And Flame

A cable claiming “halogen-free” should reference IEC 60754 test results or equivalent. Flame-retardant options beyond jacket chemistry Manufacturers also

Fiber Optic Cable Jackets and Fire Ratings Explained

Learn about fiber optic cable jackets, materials, and fire ratings. Find the right jacket for plenum, riser, or general-purpose environments.

Considerations and Recommendations for Flame-Retardant Selection

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Considerations and recommendations of flame-retardant selection for high-voltage cables, focusing on standards, materials, and performance of insulation.

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Website: https://cgweb.co.za
Technical inquiry: https://cgweb.co.za/project-enquiry.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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